Claims.

1. Method for displaying images on a display device, characterised in that use is made of a display device (1) comprising at least a general processing unit (2), a display (3) consisting of several display units (4) and an individual processing unit (5) per display unit (4), whereby, in order to display the images, data concerning the image to be displayed are transmitted from the general processing unit (2) to the individual processing units (5) in the form of a data stream (11), in that there is a control communication between the general processing unit (2) and each of the individual processing units (5) in the form of control signals (13), and in that data from the data stream (11) are collected at every individual processing unit (5) as a function of the control signals (13) transmitted to the individual processing units (5).

2. Method according to claim 1, characterised in that use is made of display units (4) which are serially coupled.

3. Method according to claim 1 or 2, characterised in that use is made of display units (4) consisting of LED panels.

4. Method according to claim 1, 2 or 3, characterised in that a distributed signal processing is provided for between the general processing unit (2) on the one hand and the individual processing units (5) on the other hand.

5. Method according to claim 4, characterised in that a distributed signal processing is at least provided for the signals related to the colour rendering, in other words a

distributed colour processing, and/or related to the brightness and/or contrast.

6. Method according to claim 5, characterised in that one or several individual adjustments are made at the individual processing units (5) related to one or several of the following possibilities:

- adjustment of the colour co-ordinates;
- adjustment of the brightness;
- adjustment of the contrast, in particular by means of what is called `dynamic sample weight distribution';
- corrective adjustment as a function of the temperature and/or age of the display unit (4);
- adjustment of the transfer functions RGB (red, yellow, blue);
- enlargement of the incoming video signal in the horizontal and/or vertical direction.

7. Method according to claim 6, characterised in that, in order to adjust the contrast, different modes are applied, whereby the linear connection between the input signal and the output signal is adjusted towards a non-linear connection, in each individual processing unit (5), as a function of the command which is given via the control signals (13).

8. Method according to claim 5, 6 or 7, characterised in that one or several individual adjustments are made at the general processing unit (2) related to one or several of the following possibilities:

- image stabilisation and/or noise suppression;

- tracking of the illumination of the image, in other words `luminance tracking', whereby certain values of the luminance are included;
- histogram equalisation as a function of the entire image to be displayed;
- observing of what is called cue flash and acting appropriately in case of such a cue flash;
- reduction of the image in relation to the original input image in the horizontal and/or vertical direction.

9. Method according to any of claims 4 to 8, characterised in that a distributed signal processing is at least provided for the signals related to the image display, in other words a distributed image processing.

10. Method according to claim 9, characterised in that a distributed signal processing is provided for which makes sure that, both at the general processing unit (2) and at the individual processing units (5), measures are taken to minimise image flickering.

11. Method according to claim 9 or 10, characterised in that in the individual processing units (5), one or several individual adjustments are made which make sure that every display unit (4) operates frequency-independent vertically and horizontally.

12. Method according to claim 9, 10 or 11, characterised in that an automatic pulse width adjustment is realised in the individual processing units (2).

13. Method according to any of claims 9 to 12, characterised in that a frequency raise is carried out in

the individual processing units (5) to eliminate what is called surface flicker.

14. Method according to any of claims 9 to 13, characterised in that the line frequency is raised in the general processing unit (2) in order to eliminate what is called the interline flicker and in order to obtain a higher image resolution.

15. Method according to any of claims 9 to 14, characterised in that a distributed signal processing is at least provided for the signals which determine the image geometry.

16. Method according claim 15, characterised in that, in order to obtain a certain image geometry, control signals (13) are transmitted to the individual processing units (5) which indicate which part of the image should be displayed at the display unit (4) concerned, whereby the individual processing units (5) then collect data from the data stream (11), process them and display them, as a function of said control signals (13).

17. Method according to any of the preceding claims, characterised in that it also provides for a dynamic image stabilisation.

18. Method according to claim 17, characterised in that at least one or several of the following techniques are applied for the dynamic image stabilisation:

- a time-dependant image stabilisation, whereby it is verified for pixels of the image how alterations in time occur between successive images, and whereby an

image stabilisation effect is provided for before the images are displayed;

- a frequency-dependant image stabilisation, whereby it is verified how alterations occur in pixels of the image situated next to one another, and whereby an image stabilisation effect is provided for before the images are displayed;
- an amplitude-dependant image stabilisation;
- an image stabilisation as a function of the entire image content.

19. Method according to any of the preceding claims, characterised in that a number of the individual processing units (5), and preferably all of them, are provided with a master clock correction.

20. Method according to claim 19, characterised in that different signals are used for the basic colours red/green/blue (RGB signals), and in that possible transmission errors in these RGB signals are minimised thanks to the above-mentioned master clock correction.

21. Method according to any of the preceding claims, characterised in that use is made of LED's (9), and in that they are driven by means of an uninterrupted current during normal operation, whereby the length of time for which the current is switched on is used as a control parameter.

22. Method according to claim 21, characterised in that in order to adjust the brightness, and thus the contrast, the value of the above-mentioned current is altered.

23. Method for displaying images on a display device, whereby the data for forming the successive images are transformed in signals for a display (3), characterised in

that the image display is improved by evaluating the above-mentioned data and by applying a dynamic image stabilisation on the basis of this evaluation.

24. Method according to claim 23, characterised in that one or several of the following techniques are used for the dynamic image stabilisation:

- a time-dependant image stabilisation, whereby it is verified for pixels of the image how alterations in time occur between successive images, and whereby an image stabilisation effect is provided for before the images are displayed;
- a frequency-dependant image stabilisation, whereby it is verified how alterations occur in pixels of the image situated next to one another, and whereby an image stabilisation effect is provided for before the images are displayed;
- an amplitude-dependant image stabilisation;
- an image stabilisation as a function of the entire image content.

25. Display device for realising the method according to any of claims 1 to 22, characterised in that it comprises at least a general processing unit (2); a display (3) consisting of several display units (4); an individual processing unit (5) per display unit (4); means (10) which transmit at least data concerning the image to be displayed from the general processing unit (2) to the individual processing units (5) in the form of a data stream (11); means (12) providing for a control communication between the general processing unit (2) and each of the individual processing units (5) in the form of control signals (13); and, per individual processing unit (5), means (14) which

collect data from the data stream (11) as a function of the transmitted control signals (13) for further processing and display.

26. Display device according to claim 25, characterised in that it is equipped with electronic circuits which make it possible to realise one or several of the steps 2 to 22 described in the claims.

27. Display device according to claim 25 or 26, characterised in that it has a modular design whereby the display units (4) are made in the form of replaceable tiles.

28. Display device according to claim 27, characterised in that it contains means which automatically recognise the position of a display unit (4) in the total image surface of the display (3).